



INTRODUCTION

Each year modifiable behaviors such as smoking, excessive alcohol consumption, and physical inactivity contribute to a substantial portion of the mortality and morbidity associated with chronic disease and unintentional injury (McKenna et al., 1998; Frazier et al., 1996). Underutilization of preventive-health services (e.g., blood pressure and cholesterol screening, cervical cancer screening) may also contribute to morbidity and premature death from many diseases. In 1998, 7,960 Montana residents died, predominantly from chronic diseases and unintentional injuries (Table 1).

Measuring the prevalence of high-risk behaviors and preventive-health services utilization provides information for targeting interventions aimed at reducing premature death and disease. From 1981 to 1983, the Centers for Disease Control and Prevention (CDC) funded 29 states to conduct point-in-time prevalence surveys of behaviors that were associated with an increased risk of developing avoidable illness and/or premature death (i.e., behavioral risk factors). In 1984, the CDC established the Behavioral Risk Factor Surveillance System (BRFSS), an annual telephone survey assessing health status and behavioral risk factors of the adult population (18 years and older) within 15 participating states. Through cooperative agreements between CDC and state departments of public health, the BRFSS has expanded to include all 50 states, the District of Columbia, and three U.S. territories.

Montana has participated in the BRFSS since 1984. The number of Montana adults sampled annually has increased from 855 in 1984 to 1,188 in 1985, and to 1,800 in 1996 through 1998. The number of questions included in the annual survey has increased from 45 questions in 1984 to 159 questions in 1998. Currently 150 interviews are completed each month. Subject areas include perceived health status, access to health care, health awareness, use of preventive services, as well as knowledge and attitudes of health care and health care practices.

The BRFSS survey provides valuable information on health trends, assessing chronic disease risk, and monitoring the effectiveness and public awareness of policies, programs and interventions. Additionally, these data are used to identify important health issues for future attention, formulate policies and legislation, and develop public awareness strategies.

The Healthy People 2000 (Public Health Service 1991, 1995) is a national initiative to improve the health of all Americans through prevention. "The initiative is driven by 319 specific national health-promotion and disease-prevention objectives targeted for achievement by the year 2000. Healthy People 2000's overall goals are to: 1) increase the span of healthy life, 2) reduce health disparities, and 3) achieve access to preventive services for all Americans."¹ Data from the annual BRFSS survey are the primary means of monitoring progress towards achieving national year 2000 health objectives (see Appendix A).

¹See <http://www.odphp.osophs.dhhs.gov/pubs/hp2000/>

This report summarizes selected results from the 1997 and 1998 surveys. Results were tabulated for the overall Montana population, as well as for subpopulations (sex, age class, education level, income class, and two racial categories). When available, data from both years were combined to yield more reliable subpopulation estimates. The numbers reported in the data tables were the actual numbers of respondents, while the prevalence estimates (as percentages) were calculated using weighted data. Variation in risk behaviors and health characteristics among subpopulations were highlighted when appropriate. Graphs depicting point estimates over time were presented for selected point estimates. As a measure of data reliability, 95% confidence intervals (CI) were presented with the percentage prevalence estimates. Readers unfamiliar with interpreting point estimates and confidence intervals may wish to consult the discussion on confidence intervals found in the Methods section of this report.

Table 1. Behavioral risk factors associated with the leading causes of death in Montana, 1998⁺.

Rank	Cause of death	Number of deaths	Percentage of total deaths*	Associated Behavioral Risk Factors
1	Heart disease	2,001	25	Smoking, lack of physical activity, high blood pressure, high-fat diet, high blood cholesterol, overweight
2	Cancer	1,816	23	Smoking, high-fat diet, chronic drinking, environmental exposure
3	Cerebrovascular disease (including stroke)	576	7	High blood pressure, smoking, high blood cholesterol
4	Chronic obstructive pulmonary disease	505	6	Smoking, environmental exposure
5	Unintentional injury	463	6	Binge and chronic drinking, smoking, non-use of safety belts
6	Pneumonia and influenza	371	5	Smoking
7	Diabetes	196	2	Overweight
8	Suicide	156	2	Binge and chronic drinking
9	Alzheimer's disease	107	1	Unknown
10	Chronic liver disease and cirrhosis	90	1	Chronic drinking
	Total	6,281	79	

+ Mortality data are from the Montana Department of Public Health and Human Services, Vital Statistics Bureau, 1999.

* Total deaths from all causes in 1998 was 7,960.